

SUPPLEMENT

THE INSTITUTION OF PRODUCTION ENGINEERS, 10 CHESTERFIELD STREET, MAYFAIR, LONDON, W.1

I.Prod.E. SUMMER SCHOOL CRANFIELD

29th August -
1st September
1961

THE INTER-RELATION OF WORK STUDY, ERGONOMICS, OPERATIONAL RESEARCH AND CYBERNETICS AND THEIR APPLICATION TO PRODUCTION ENGINEERING

The School will be held at the
COLLEGE OF AERONAUTICS, CRANFIELD

Assemble 6 p.m. on Tuesday, 29th August; disperse after lunch on Friday, 1st September.

Lectures will be given in the mornings and on two evenings by the following team:

Dr. J. E. Faraday, Work Study Department, I.C.I. Ltd.

J. Murdoch and **W. T. Singleton**, College of Aeronautics, Cranfield.

G. P. Wade, Engineering & Allied Employers West of England Association.

Dr. E. Edwards, College of Advanced Technology, Loughborough.

A. E. De Barr, Machine Tool Industry Research Association.

Dr. T. Lupton, College of Advanced Technology, Birmingham.

Professor J. Loxham and **Mr. Seymour Hills** will arrange demonstrations in their finely equipped laboratories in the afternoons.

Accommodation: The excellent accommodation and catering in the Halls at Cranfield will be available. Early application, using the form below, is advisable as the number of places is limited to 120.

Cost: The inclusive fee for the School, which will also cover accommodation, meals and gratuities is **10 guineas**.

Application Form

SUMMER SCHOOL, 29th AUGUST - 1st SEPTEMBER, 1961, CRANFIELD.

Please reserve a place for.....
of the

Remittance of £10 10s. (made payable to The Institution of Production Engineers) is enclosed.

Please return this form to: **The Secretary, 10 Chesterfield Street, Mayfair, London, W.1.**

SCHOFIELD TRAVEL SCHOLARSHIP

The Council of the Institution announces that the above scheme ceases forthwith, and that it is being replaced by :

A BURSARY

of £600 per annum, tenable at a U.K. University for postgraduate studies in Production Engineering.

The figure given includes fees and the Bursary will be tenable for the first time for September - October 1962 entrants.

It is required that applicants must :

- (a) hold a first degree in Engineering or a Diploma in Technology (Eng.);
- (b) have fully discussed his proposed course or work with the University of his choice;
- (c) have been accepted by the University.

Further details of the Bursary, giving procedure to be adopted by applicants, will be published later in the year.

MATERIALS HANDLING CONVENTION, 1961

"PROFIT BY HANDLING!"

The Materials Handling Group of the Institution is to hold a Convention in London on the theme: "**Profit by Handling!**" The Convention will study the methods and administration of handling materials from source to consumer with a view to lower costs.

Reserve the date now — 3rd and 4th November, 1961.

Full details will be announced in subsequent issues of the Supplement.

Production Appointments

BULLETIN No. 94

JULY, 1961

The last date for receiving material for insertion in the following month's bulletin is the 20th of each month, and cancellations cannot be accepted after this date. Correspondence should be addressed to: The Publications Department, The Institution of Production Engineers, 10 Chesterfield Street, Mayfair, London, W.1 (Telephone: GROsvenor 5254).

RATES — Run-on, per appointment: £4 4s. 0d. up to 100 words; £1 1s. 0d. for each additional 100 words or part thereof. Special rate for firms affiliated to the Institution, technical colleges and universities: £2 2s. 0d. per appointment up to 100 words, and 10s. 6d. for each additional 100 words or part thereof.

Displayed: £6 per single-column inch (column width 3½ in.). Special rate for firms affiliated to the Institution, technical colleges and universities: £5 10s. 0d. per single-column inch. Agency discount on displayed advertisements 10%.

Advertisers are advised that better response is likely if, in addition to essential qualifications, the following information is given:

(a) Location of appointment; (b) Status in the organisation and scope of promotion; (c) Salary range and age range. Advertisers are asked to advise the Institution when appointments are filled. The Institution reserves the right to refuse or withdraw any announcement and also to make any alteration in the wording to ensure conformity with the Institution standards. *Members interested in the following appointments should make application in accordance with the terms of notice. No correspondence can be undertaken by the Secretary other than the forwarding of replies to Box Nos.*

STC TRANSISTORS

The following vacancies have occurred in the
PRODUCTION ENGINEERING DEPARTMENT

for holders of H.N.C., or whose experience is equivalent, and who are aged 25-40.

WORK STUDY ENGINEER

Initially to introduce method and motion study and work measurement for the preproduction model shops, not later to make studies in general production. Some familiarity with transistor and diode technology would be an advantage but experience in work study is highly desirable.

PROJECT ENGINEER

For the development and initial design of Mechanical, Hydraulic and Pneumatic equipment. Some knowledge of electro mechanical/engineering and of servo mechanisms will be an advantage.

PRODUCTION ENGINEER

For the Hermetic Seals Section. Some knowledge of physics and of Work Study would be an advantage. Experience in the glass/metal sphere would be especially appropriate.

All these positions offer good prospects for advancement in a Company, which operates the full range of all employee benefits, including a non-contributory Pension Scheme

Applicants should write to:

W. J. YEOMANS, Personnel Manager

Standard Telephones and Cables Limited

FOOTSCRAY, SIDCUP, KENT

stating age, experience, qualifications and salary required

Chief Draughtsman required with wide experience in gauge manufacture. Non-contributory Pension and Life Insurance plan in operation. Apply: General Manager, Solex (Gauges) Ltd., 72 High Road, Chiswick, W.4.

Cincinnati Milling Machines Ltd. have the following vacancies in their Engineering Department: **Estimator (Proposal) Engineer**, Engineer (23-40 years) having had recognised apprenticeship preferably with machine tool manufacturer, H.N.C. or O.N.C. and experience in design of machine tools and/or Jig and Tools, required engineering estimating on die sinking and automatic copy milling machines. **Electrical Estimator**, Age 25-40. Must be able to produce schematic layouts on control panels and circuits for special machines in connection with engineering department and estimate prices on all electric equipment used in a machine. **Estimator** specialising in tool handling equipment. Capable of preparing draft layouts of work holding fixtures and mechanical handling devices. Desirable, varied experience in jig and tool design and manufacture. Salary and grading commensurate with qualifications and experience. Applications will be treated confidentially and should be by letter to: Woodlands Farm Road, Erdington, Birmingham, 24.

Production Development, Methods and Estimating Engineers

Good opportunities are open at a light engineering factory situated in a rural area of the South Midlands. New Houses to rent, accessible to both the factory and local amenities, are available at once to successful applicants. Commencing salaries up to £1,000 per annum.

Men with an apprenticeship and technical qualifications, are invited to apply for the following vacancies.

METHODS ENGINEERS for dealing with day-to-day methods problems in Machine and Assembly Shops manufacturing light mechanical and electrical assemblies. Must have proven ability in reaching quick solutions and establishing improved methods.

METHODS ENGINEER—METAL FINISHING required with specialist knowledge of metal finishing processes in addition to general knowledge as above. Must be conversant with up-to-date pre-treatment processes for base materials and modern spray and dip finishing techniques.

DEVELOPMENT ENGINEER for investigating and solving a variety of long term machining problems to improve production methods and manufacturing techniques particularly with regard to new or re-designed products. Must have sound experience of modern machine shop practice and be capable of imaginative thought. A knowledge of automatic lathes is desirable but not essential.

ESTIMATING ENGINEER required to compile complete Factory Cost Estimates from Experimental or Production drawings. Previous experience in Work Study, Process Planning or Drawing Office desirable and practical experience of Estimating essential.

Please apply with full details to: Personnel Manager, Box No. 2048, I.Prod.E., 10 Chesterfield Street, Mayfair, London, W.1.



MICHELIN

requires

Engineers for appointment to Production Management positions after a careful introduction to the Company's systems and methods.

These appointments, which have occurred as the result of recent promotions and the need for further development, provide excellent opportunities for ambitious men to share in the expansion of a very progressive international Company.

Candidates should be in the age range 28-40 and should be members of recognised professional institutions. They must have Industrial Management experience.

The Company pays good salaries, which are reached by individual agreement. It operates good pension and insurance schemes and a comprehensive scheme of housing assistance.

There are excellent opportunities for overseas service if desired.

Applications should be made to: H. A. Dille, Ref. No. PE/113, Michelin Tyre Co. Ltd., Stoke-on-Trent, Staffs.

N.B. It is of interest to note that Stoke-on-Trent is not in the "Black Country" and that the majority of our Management staff live in purely residential areas away from the industrial environment but within 2-3 miles of the factory.

PLANNING/PRODUCTION MANAGER

The appointment is of a senior character in a Precision Engineering firm with a works labour force of some 500. It covers responsibility to the Production Director for the following sections which have a staff of 16:

- (a) Method Study, work measurement and preparation of incentive schemes;
- (b) bonus calculations;
- (c) scheduling, forward loading and progressing under batch production principles;
- (d) preparation of management production control data.

The position is permanent and could have good long-term prospects for the right man who is anxious to make a future for himself. Candidates must have had a sound basic engineering and work study training. A recognised qualification in mechanical or production engineering would be an advantage, but is secondary to having held a position similar, or immediately junior, to the one here advertised. Age preferred 30-40. Starting salary not less than £1,200. Residence in Sheffield within one year of appointment essential.

Applications should be addressed to: Production Director, Messrs. James Chesterman & Co. Ltd., Bow Works, Pomona Street, Sheffield, 11. These will be treated in confidence and must give full personal details and a summary of experience and qualifications.

ORGANISATION AND METHODS OFFICER

Applications are invited from experienced Organisation and Methods Officers in the engineering industry.

Applicants should be experienced in quantity production methods and modern methods of Management Control.

Responsibility will include the development of procedures in a new field connected with the automobile industry, together with the revision of existing procedures. This post which is situated in the North West offers responsibility and scope to the candidate with initiative and ability.

Commencing salary will be not less than £1,250 per annum, and working conditions are excellent. An attractive contributory pension scheme is in operation with free life assurance benefits.

Applications, in strict confidence, should be addressed to: BOX NO. 2046, I.PROD.E., 10 CHESTERFIELD STREET, MAYFAIR, LONDON, W.1.

W. H. ALLEN, SONS & CO., LTD. BEDFORD

wish to appoint

AN EXPERIENCED PRODUCTION ENGINEER (Ref. No. 1611E/2/3) to fill a vacancy created by promotion. Candidates should be capable of originating and developing important manufacturing techniques over the Company's range of products, on a one-off and small batch basis which includes steam turbines, pumps, diesel engines and electrical machinery.

Application forms giving conditions of service, etc., should be obtained (quoting the above reference number) from:

**THE PERSONNEL MANAGER
QUEENS ENGINEERING WORKS
BEDFORD**

WORK STUDY

Vacancies exist in the Work Study Department of a large company in the Midlands, in the heavy industrial field. An interesting range of work is offered, and the men appointed will be encouraged to develop further their ability and knowledge. Men with a H.N.C. and a minimum of three years' Work Study experience are invited to apply. A Degree, or membership of a professional institution would be an added advantage.

Please reply stating full relevant details to:

BOX No. 2045, I.PROD.E., 10 CHESTERFIELD STREET,
MAYFAIR, LONDON, W.1.

Machine Tool Designer

A MACHINE TOOL DESIGNER or TOOLING ENGINEER between 25 and 35 years of age, having a broad experience of most types of machine tools. (A degree qualification an advantage but not essential.)

Must have imagination to assess the application of a new range of automatic gauging and machine error correction devices to existing machine tools and, later, to lead a team developing complete machine tools incorporating these techniques, to achieve greater reliability and production in the high precision field.

Salary according to ability but not less than £1,500.
BOX NO. 2049, I.PROD.E., 10 CHESTERFIELD STREET, MAYFAIR, LONDON, W.1.

GENERAL MANAGER — WORKS SERVICES

for light engineering Company with headquarters in the South London area, engaged in high volume production of precision electro-mechanical equipment. The Company employs over 2,000 people in several locations but is planning to move its main works to new premises where possible expansion may rise to 450,000 sq. ft. to meet the demand for increased output. He will be responsible to the Managing Director for planning and co-ordinating the proposed move; for functional supervision of manufacturing activities at all locations and centralised control of quality, purchasing and building maintenance.

Applicants must be graduates or professionally qualified Mechanical or Production Engineers with experience as Works Managers or Chief Production Engineers in companies working in a similar field. Age 35-45 but must not exceed 50. Initial salary up to £3,000 per annum, Pension and Life Insurance Schemes, etc.

Applications with full personal details should be addressed to:

BOX NO. 2047, I.PROD.E.,
10 CHESTERFIELD STREET,
MAYFAIR, LONDON, W.1.

MASSEY - FERGUSON

require

Inspection Gauging Engineer

O.N.C. minimum qualification.
Design experience of jig and positional gauging fixtures and good basic knowledge of precision measuring techniques essential.
Knowledge of all types of gauges, including Air Gauges, Electronic and Mechanical Dial Indicating gauges desirable.

Applications quoting Ref. KK 78/P1 to:

PERSONNEL AND INDUSTRIAL RELATIONS

MANAGER

BANNER LANE

COVENTRY

Senior Jig and Tool Draughtsman. Experienced man, preferably with H.N.C. or similar qualification, is required for a wide variety of jig and tool design work. The position offers excellent prospects of advancement for a younger man. Applicants in confidence to: Personnel Officer, Crompton Parkinson (Chelmsford) Ltd., Chelmsford, Essex.

Black & Decker

PROCESS ENGINEERS

Required for Production Engineering Department

Applications are invited from Engineers who possess Machine or Winding Shop Experience and:

- (a) A practical background with a good knowledge of Modern Production Techniques.
- (b) Experience in the analysis of Design for Production, allied with Cost Estimation.
- (c) The ability to determine Tooling requirements for production.
- (d) The ability to carry out investigations into all Production Engineering Problems.
- (e) Education standard to H.N.C. preferred.

Written applications should give experience, age, qualifications and present salary to:

Personnel Manager

BLACK & DECKER LIMITED

Harmondsworth, Middlesex

NATIONAL INSTITUTE FOR RESEARCH IN NUCLEAR SCIENCE

have the following vacancies at the Rutherford High Energy Laboratory now under construction adjacent to the Atomic Energy Establishment at Harwell, Berkshire.

N.I.R.N.S.

TECHNICAL STAFF are required to work in a group concerned with the estimating, planning, procurement and progressing of a wide variety of plant and equipment required for the Laboratory's research programme. The work covers a broad technical field and involves close liaison with design and scientific staff, but previous experience of nuclear work is not necessary for these posts. A sound basic training in mechanical engineering is required together with experience of modern manufacturing methods.

Vacancies exist in:

ESTIMATING SECTION (Post Ref. VN 64/324)

An experienced estimator is required to prepare estimates for a variety of projects, to investigate contractors claims and control a small estimating staff. Experience of working in collaboration with design staff and a knowledge of price negotiation and contract procedure is desirable. The salary of the post is £1,210 - £1,490 with annual increments to the maximum of the scale.

ESTIMATING SECTION (Post Ref. VN 65/324)

An experienced estimator is required to prepare estimates for the supply and installation of a variety of equipment from either fully detailed information or design sketches. Good experience of estimating for mechanical engineering work is essential. The salary of the post is £1,060 - £1,210 with annual increments to the maximum of the scale.

PROGRESS SECTION (Post Ref. VN 66/324)

A Technical Officer is required to prepare progress schedules and reports; analyse manufacturing requirements and procure special materials; co-ordinate and progress orders relative to agreed programmes. Experience of progress requirements is essential and a knowledge of contract procedure is desirable. The salary of the post is £1,060 - £1,210 with annual increments to the maximum of the scale.

There is a contributory superannuation scheme, transport facilities are available and assistance is given with housing. If you are interested in joining this new organisation then please send a post card for further details to:

Personnel Officer,

Rutherford High Energy Laboratory, Harwell, Berkshire.

(quoting the appropriate reference number)

DUNDALK ENGINEERING WORKS LTD.

DUNDALK, IRELAND

require the services of a young

PLANNING ENGINEER

to work on the introduction of a planning system, under the guidance of consultants. The subsequent implementation of the system will be his responsibility

A salary of £1,000 per annum will be paid, and applicants should write to the Secretary, giving full details of age, qualifications and experience

Senior Jig and Tool Designer

required by

engineering company for development work on high speed diesel engines. Good conditions of service, and interesting work in a progressive factory. Please apply for Senior Staff Application form to: H. W. Marsden, Personnel Manager, Pettors Limited, Staines, Middlesex.

WORK STUDY ENGINEER

A vacancy is present in the Work Study Department of a World Famous Precision Engineering Company situated in the West London area for a Work Study Engineer to carry out investigations in the products, manufacture, processes and procedures including liaison with Design Engineers, Production Engineers and Administrative Departments. The successful applicant will have H.N.C. or membership of The Institute of Work Study, The Institution of Production Engineers or equivalent qualifications. He will have had experience in the light electro-mechanical industry. An age bracket of 35-45 is expected.

Write: Box AC29992, Samson Clarks, 15-17 Marylebone Road, London, N.W.1.

Senior Draughtsmen required with wide experience in gauge design and application. Non-contributory Pension and Life Insurance plan in operation. Apply: Chief Design Engineer, Solex (Gauges) Ltd., 72 High Road, Chiswick, W.4.

Production Engineer required by general engineering company in the East Midlands. The Company produce a large range of products in the medium/heavy engineering category generally on a batch basis, and applicants should be qualified engineers with experience of machine and fitting shops, foundry and boiler and fabrication shop processes. The applicant appointed will be responsible for production methods, ratelining and work study, being in control of the appropriate section of the production control department. He must possess initiative, drive and tact in handling personnel. Pension scheme. Housing assistance, if required. Applications, in confidence, to: The Managing Director, Box No. 2450, I.Prod.E., 10 Chesterfield Street, Mayfair, London, W.1.



CHIEF PRODUCTIVITY ENGINEER

We are engaged in the manufacture of textile machinery, passenger lifts and air conditioning equipment and are about to undertake a three-year programme of extensive improvements to our productivity in a works employing 1,500 workpeople and staff. This will involve a major works re-layout and the widespread application of method improvements to secure greater labour and machine utilisation. We are seeking a suitably qualified man who will be directly responsible to the Deputy Managing Director for the direction of a team of engineers and Workstudy men engaged on this task. Applicants should preferably be Associate Members of a recognised Engineering Institution, aged 30 to 40 years, and at present holding a responsible position in the field of Industrial Engineering or Work Study.

Starting salary will be dependent on the background experience and qualifications of the successful candidate but will be commensurate with a position of this status and responsibility.

Apply to Mr. B. C. HILTON, Deputy Managing Director,

TWEEDALES and SMALLEY LIMITED
CASTLETON · ROCHDALE · LANCASHIRE

PRODUCTION ENGINEER

is required by

HARRIS LEBUS LTD.

to fill the new post of Technical Manager in a company engaged in the large scale manufacture of domestic furniture.

This is a senior managerial appointment with unusual scope and responsibility. The man selected will be responsible to the Works Director for the leadership and co-ordination of the Product Development, Production Methods, Quality Control and Research Departments.

Applicants should have had an engineering training and considerable experience of large scale production and be able to demonstrate the power of original thought to produce practical and economic proposals. Work Study, equipment design or other special experience is desirable. A degree in an applied science or membership of The Institution of Mechanical or Production Engineers would be an added advantage.

The salary envisaged is £2,500 which may be varied according to experience and ability. Applications from men aged about 35 - 45, giving full details of qualifications and experience should be addressed to:

PERSONNEL MANAGER,
HARRIS LEBUS LTD.,
FINSBURY WORKS,
TOTTENHAM, N.17.



Vacancies for

GRADUATES AND HOLDERS OF H.N.C.

Aged 21 - 35

FACTORY LAYOUT

An Assistant to the Layout Engineer, preferably with experience in production engineering, to make special studies of the layout of sections, the handling of materials, etc.

PLANNING

An Engineer for Coil, Transformer and Small C.P.A. Planning. An electrical bias, with mechanical qualifications, preferred.

MACHINE DESIGN

A Section Leader for the design and development of special machines for production. Some electrical knowledge is desirable. Ability to lead a team essential.

Hours of work: 8.45 a.m. to 5.15 p.m. with a 5 p.m. finish on Friday.

All these positions are progressive and carry attractive salaries.

The Company operates the full range of fringe benefits including non-contributory Pension and Sickness Benefits scheme.

The Factory is situated in a pleasant residential district, only 13 miles from the centre of London.

Please write, in confidence, giving a history of age, qualifications, experience and salary required to:

W. J. YEOMANS, Personnel Manager,
KOLSTER-BRANDES LIMITED
FOOTSCRAY, SIDCUP, KENT

Work Study Engineer required by enterprising and expanding small firm near Shrewsbury, to relieve Works Manager of all Work Study and to train as his assistant. Applicants must be aged 25 - 30 years, have served a full apprenticeship and had several years in Work Study. Salary about £1,000. Write giving full details to: Box 2051, I.Prod.E., 10 Chesterfield Street, Mayfair, London, W.1.

Works Managers. Manufacturers of high-grade navigational instruments with world-wide connection require the services of a Works Manager for factory in London area employing approximately 90 male and female staff. Applications are invited from qualified men capable of controlling all factory activities and interested in introduction and development of new projects. Some knowledge of electronics an advantage. Applications, in first instance, in writing to: Somerset Cowper & Co., 199 Piccadilly, London, W.1.

MANAGEMENT CONSULTANTS

Binder, Hamlyn, Fry & Co. are looking for young men with imagination and ability who have had varied experience in industry and who now wish to make a career in management consultancy. The successful applicants must have an ambition not only to become experts in their own fields but to gain a sound knowledge of other branches of consultancy. Further training will be given to enable them to achieve this.

Production Engineers

Applicants should be qualified engineers, aged 30 - 35, with at least 5 years' varied experience in production engineering, production control, plant layout, and other aspects of works management. A sound practical knowledge of work study is essential. We are looking for men with a high degree of technical skill and adaptability as the work covers a wide range of industries and production problems.

An attractive salary, together with pension scheme and other benefits, will be paid to the successful applicants.

Please write, giving fullest details of education, training, experience and salaries earned to:

Binder, Hamlyn, Fry & Co.,
121 Queen Victoria Street,
London, E.C.4.

All replies will be treated in the strictest confidence.

CHIEF PRODUCTION ENGINEER

required by

BLACK & DECKER LTD.

Applicants must be apprentice-trained engineers with wide experience of machining and tooling for light engineering mass and batch production.

Education to H.N.C. Standard.

The post carries responsibility for the Production Engineering Department including a jig and Tool Drawing Office.

Preferred age 32 to 40.

Written applications must give details of age, experience, education, qualifications and present salary.

Address to: **PERSONNEL MANAGER, BLACK & DECKER LTD.,
HARMONDSWORTH, MIDDLESEX.**

Engineer for developing improved manufacturing methods. Applicants must have drawing office and design experience. Age 26 - 30 with good educational background and O.N.C. or preferably H.N.C. diploma. Apply in writing giving details of experience to: The Secretary, Edward Elwell Ltd., Edge Tool Manufacturers, Wednesbury, Staffs.

Production Process Planning Engineer required by expanding group of companies engaged in the manufacture of electronic and telecommunications equipment. Experience of press tools and batch production methods desirable. Preferably between 25-35 years of age, with H.N.C. in Mechanical or Production Engineering. Salary commensurate with responsibilities. Permanent pensionable position. Apply: Personnel Officer, Airmec Ltd., High Wycombe, Bucks. (H.W.2501-7)

Progress Clerk required for training as Production Controller age 20-30 years minimum educational level G.C.E. three subjects including English and Mathematics. Applicants must possess minimum three years' experience as Progress Chaser or Assistant Production Controller; some buying experience an asset. Fully detailed applications including salary required should be addressed to: The Works Manager, Chain Link Fencing Ltd., Kings Langley, Herts. Tel. Kings Langley 4041-4.

WORK STUDY

Holoplast Ltd. (Manufacturers of Laminated Plastics within the Reed Paper Group) wish to appoint further staff to their Work Study Department.

Applications are invited from men aged over 25 years with a real interest in finding, measuring, analysing and presenting facts upon which managerial decisions can be reliably based. Two or more of the following requirements should be fulfilled.

1. A minimum of one year's experience in method study and/or work measurement;
2. A sound industrial background with an engineering bias;
3. A recognised qualification in Science or Technology (or currently studying for same).

Further training will be given if necessary. Starting salaries will be commensurate with experience and qualifications. Excellent fringe benefits are in operation. Written applications stating age and brief details of career to date should be addressed, in confidence, to:

**THE GROUP PERSONNEL OFFICER,
ALBERT E. REED & CO. LTD.,
LARKFIELD,
Near MAIDSTONE, KENT.
(quoting ref. WS/HL/23)**

TOOLS DIVISION MANAGER

Applications are invited from experienced Press Tool Engineers for this senior position. Several hundred people are employed in the Division designing and manufacturing tools for most industries.

Preferred age under 45.

Detailed applications to: **Director and General Manager, Turner Brothers (Birmingham) Ltd., Cliveland Street, Birmingham, 19, marked confidential.**

EDUCATIONAL APPOINTMENTS

The College of Aeronautics, Cranfield, Bletchley, Bucks.
Senior Lecturer in Machine Tool Technology. Applications are invited for the appointment of Senior Lecturer in Machine Tool Technology in the Department of Production and Industrial Administration. The person appointed will be required to supervise a comprehensive programme of research into machine tool performance in a new and well-equipped laboratory. Supporting facilities will be provided by the Departments of Mathematics, Materials and Electrical Engineering. An important part of the research work will be the development of a series of experiments specially designed to assist in the teaching of the new and advanced technologies of engineering manufacture in universities and technical colleges. The salary will be within the scale £1,900 × £75 - £2,425 per annum, with superannuation under F.S.S.U. and family allowance, the commencing salary depending upon the qualifications and experience of the successful candidate. Consideration will be given to housing requirements. Applications, giving full particulars of experience and qualifications and the names and addresses of three persons to whom reference may be made if required, should be forwarded to: The Recorder, The College of Aeronautics, Cranfield, Bletchley, Bucks. Further particulars are available.

County Technical College and School of Art, Chantry Park, Newark, Notts.

Assistant Lecturer (Grade B) in Mechanical Engineering Production. Applications are invited for the appointment of an Assistant Lecturer (Grade B) in Mechanical Engineering Production, to commence 1st September, 1961, or as soon thereafter as possible. Candidates must be able to offer Workshop Practice, Technology and related subjects to all levels of Machine Shop Engineering classes from first year craft level up to final City and Guilds standard. A Higher National Certificate in Production Engineering or a first-class City and Guilds Technological Certificate is essential, together with a good practical experience. Previous teaching experience, though desirable, is not essential. The present Burnham Technical Grade B scale is £700 × £27 10s. (15) × £37 10s. (1) - £1,150 per annum. There are additions for approved qualifications and training and, to determine the point of entry, increments will be given for War/National Service and approved industrial experience. The post is contributory under the Teachers' (Superannuation) Acts. Letters of application (no forms) giving full details, and the names and addresses of two referees, should be sent to the Principal (address above) not later than first post on Monday 17th July, 1961.

South-East Essex Technical College, Longbridge Road, Dagenham, Essex.

Required in September (or as soon as possible) — **Assistant Lecturer (Grade B)** to teach Mechanical and/or Production Engineering subjects to National Certificate and City and Guilds courses. Applicants should hold professional engineering qualifications and have had suitable industrial experience. Salary: £700 × £27 10s. (15) × £37 10s. (1) - £1,150 per annum. Increments allowed for war/national service and relevant industrial/commercial experience. Additional London allowance payable. Further particulars and application forms from: The Clerk to the Governors at the College.

UNIVERSITY OF BIRMINGHAM

Institute for Engineering Production

SPECIAL RESIDENTIAL COURSE

on

"METAL CUTTING PRINCIPLES"

(Course Tutor — PROFESSOR MILTON C. SHAW)

21st AUGUST - 1st SEPTEMBER, 1961

This special two-week course has been planned by Professor Milton C. Shaw, Head of the Metals Processing Division of the Massachusetts Institute of Technology, U.S.A., and President of the International Institution for Production Engineering Research.

The course is intended for senior production engineers from industry, and it will be primarily concerned with the principles of metal cutting. It will be held at The University Institute for Engineering Production, "Southfield", 16 Norfolk Road, Edgbaston, Birmingham, 15, from 9.30 a.m. on Monday, 21st August, until 3.30 p.m., on Friday, 1st September, 1961. The charge for the Course will be 70 gns., covering tuition and all residential charges.

The Course will include the following lectures :

Cutting Mechanics; Dynamometers; The Solution of Practical Machine Problems; Materials (The Atomic Viewpoint, Engineering Characteristics, The Nature of Tool Materials); Power Requirements; Basic Principles of Friction, and their Application to Metal Cutting; General Principles of Wear Applied to Metal Cutting; Informal Discussion Sessions; The Wear and Evaluation of Metal Cutting Tools; Machining Economics; Problem Sessions, Tool Temperatures; Free Machining Steels; Machinability; Cutting Fluids; Machine Tool Vibrations; Grinding; Discussion of Atomic Screw Machine Problem; Surface Metrology; The Shear Angle Problem and Chip Curl; Laboratory Visits; Metal Cutting Literature; Cutting of Brittle Materials; Chip Control; New Manufacturing Methods.

Professor Shaw will himself contribute many of the lectures and act as course tutor throughout. Supplementary lectures will be given by the members of the University Staff and visiting specialists from industry.

Correspondence regarding the Course should be addressed to :

**The Director,
The Institute for Engineering Production,
16 Norfolk Road,
Birmingham, 15.
Telephone: EDGbaston 0390.**

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309 - 317 Borough High Street,
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